

SAND BARS AND DEPOSITS NEAR MARE ISLAND.

LETTER

FROM

THE SECRETARY OF THE NAVY,

IN ANSWER TO

Resolution of the House of Representatives of January 21, 1880, for "any and all information in possession of his department relating to the formation of bars and deposits of mud, sand, and gravel at or near Mare Island," California, &c.

JANUARY 30, 1880.—Referred to the Committee on Naval Affairs and ordered to be printed.

NAVY DEPARTMENT,
Washington, January 27, 1880.

HON. SAMUEL J. RANDALL,
Speaker of the House of Representatives:

SIR: In answer to the resolution of the House of Representatives of the 21st instant, directing the Secretary of the Navy to furnish the House any and all information in possession of his department relating to the formation of bars and deposits of mud, sand, and gravel in the bay at or near Mare Island, and further, to inform the House whether any steps have been taken, or are contemplated, to arrest such formations or deposits, and whether, in his opinion, such formations or deposits can be permanently prevented, I have the honor to state that in the year 1852 a board of naval officers was appointed to examine the Bay of San Francisco and adjacent waters and to select a site for a navy-yard. This board made a very careful examination of the points supposed to possess the requisite advantages for a naval station, and, after mature deliberation, came to a conclusion, agreeing with the report of a former board composed of Army and Navy officers that Mare Island was the most eligible and advantageous position that could be found in the waters of the Bay of San Francisco and its adjacent waters for naval purposes, and they reported accordingly.

At the time this examination was made the waters of the Sacramento, Napa, and other rivers emptying in the Bay of San Francisco were comparatively clear, and the waters in the vicinity of and at Mare Island were sufficiently deep for all naval purposes. Subsequent to this selection a method of mining known as hydraulic mining was introduced, and the result was that in a short time a very large tract of land, amounting probably to millions of acres, was washed away to a depth of from 25 to probably 200 feet.

The immense *débris* from this very extensive operation found its way through ravines and low lands to the headwaters of the Sacramento, Napa, and other rivers, and such quantities as were not deposited by slackwater on these several rivers found its way to the Pacific Ocean through the Golden Gate. Immense quantities of this material have been deposited in the Sacramento River, Suisun Bay, Napa Straits, and other rivers, and in the adjoining low agricultural grounds, until the accumulations have become of serious character, and have already caused much litigation on the part of landholders whose lands have become ruined or seriously damaged.

At an early period reports were received from the Mare Island navy-yard that the water was shoaling in its front, and allotments were made from time to time, as the means of the department would admit, for dredging to preserve a sufficient depth of water.

In 1873, a board of civil engineers was appointed to examine and prepare a plan for the future improvement of this yard. That board proposed to advance the present water-front 100 feet and to construct a straight line of quay wall, believing that the current would sweep along this wall and scour the bottom so as to maintain a sufficient depth of water to allow vessels easy access to the yard. To accomplish this object, estimates have been submitted from time to time, but no appropriations have been made, and the department has been left without the means to protect this most important and only station on the Pacific coast.

Early in 1879, a hydrographic survey of the river in front of the yard was made and it was found that vessels of the lightest draft could not reach the wharves of the yard. The department at once directed that the place should be dredged, and an allotment was made for the purpose. This work has been accomplished, and we now have a fair depth of water in front. The accompanying plan will show the depth of water in 1864, the depth in 1872, the depth in 1879, prior to the dredging, and the depth in 1879, after the dredging.

In answer to the question as to "whether any steps have been taken or are contemplated to correct such formations or deposits," I have the honor to say that the Bureau of Yards and Docks has suggested a plan, and, in accordance with that plan, asked for appropriations to carry it into execution, but Congress has never made the appropriation.

With regard to the question whether in my opinion "such formations or deposits can be permanently prevented," I beg leave to say that it is a question difficult to answer, and one which cannot be answered without a thorough and careful examination of the premises by a board composed of the most able and eminent engineers of the country. It is a question of vast magnitude, one involving the interests of one of the largest and most important enterprises of the country, the great mining interests of the West. It is said that the receipt for the last year from this mining interest is over and above \$20,000,000, and it now becomes a question whether if, as it is supposed, this process of mining is ruining our rivers, bays, and agricultural lands, it would be best to stop the business by legislation, or suffer the great consequences which will result from its continuance, by the obstruction of navigation, the destruction of our harbors, and the immense damage sustained by the agricultural interests in that section, and this the department believes to be a question for Congress to determine.

I am, sir, very respectfully,

R. W. THOMPSON,
Secretary of the Navy.

